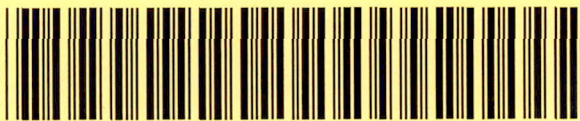


\*284IHSSF1092\*



DocumentID NONCD0002815

Site Name CAROLINA CHEMICAL CORP (FORMER)

DocumentType Ranking (RANK)

RptSegment 1

DocDate 7/22/2008

DocRcvd 7/22/2008

Box SF1092

AccessLevel PUBLIC

Division WASTE MANAGEMENT

Section SUPERFUND

Program IHS (IHS)

DocCat FACILITY

INACTIVE SITES RANKING SYSTEM  
SUMMARY SHEET

STATE FILE

Site Name: Carolina  
~~Cardinal~~ Chemical Corporation

Location: Wilson, Wilson County

ID Number: NO NCD 000 2815

Ranked By: Sue Robbins Date: 06/30-7/3/08

Reviewed By: Ginny Henderson Date: 07/22/08

Site Description/Comments:

The site was formerly used by several former wholesale agrichemical supply companies until 1996. Pesticide mixing was performed on-site. Many containers in and around the former pesticide formulation building were noted to be in poor condition, leaking or open. Pesticide contamination, including DDT, DDD and dieldrin and metals, including arsenic, has been found in soils and groundwater.

Route Scores: GW = 65.18 SW = 41.90 A = 0.00 P = 25.00

Total Score: 
$$\frac{((65.18)^2 + (41.90)^2 + (0.00)^2 + (25.00)^2)^{1/2}}{2} = \underline{\underline{40.71}}$$

# I. GROUND WATER ROUTE WORK SHEET

Rating Factor	Assigned Value (Circle One)	Score
---------------	--------------------------------	-------

## A. Route Characteristics

1. Depth to Water Table                      0 2 4 6 8 10

2. Net Precipitation                              0 1 2 3

3. Hydraulic Conductivity                      0 1 2 3

4. Physical State                                  0 1 2 3

Total Route Characteristics Score	14
B. Containment	0 1 2 3
	3

## C. Waste Characteristics

1. Toxicity/Persistence                      0 3 6 9 12 15 18

2. Hazardous Waste Quantity                0 1 2 3 4 5 6 7 8

Total Waste Characteristics Score	23
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## Ground Water Route of Migration Score

The Ground Water Route of Migration Score is obtained by multiplying lines A, B, and C and dividing this by 14.82 to give a score between 0 and 100.

Total Ground Water Route of Migration Score: 65.18

## II. SURFACE WATER ROUTE WORK SHEET

Rating Factor	Assigned Value (Circle One)	Score
---------------	--------------------------------	-------

### A. Route Characteristics

- |   |              |
|---|--------------|
| 1. Facility Slope and Intervening Terrain | 0 1 2 3      |
| 2. 1-yr., 24-hour Rainfall                | 0 1 2 3      |
| 3. Distance to Nearest Surface Water      | 0 2 4 6 8 10 |
| 4. Physical State                         | 0 1 2 3      |

		Total Route Characteristics Score	9
B. Containment	0 1 2 3		3

### C. Waste Characteristics

- |                             |                   |
|-----------------------------|-------------------|
| 1. Toxicity/Persistence     | 0 3 6 9 12 15 18  |
| 2. Hazardous Waste Quantity | 0 1 2 3 4 5 6 7 8 |

		Total Waste Characteristics Score	23
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### Surface Water Route of Migration Score

The Surface Water Route of Migration Score is obtained by multiplying lines A, B, and C and dividing this by 14.82 to give a score between 0 and 100.

Total Surface Water Route of Migration Score: 41.90

### III. AIR ROUTE WORK SHEET

Rating Factor	Assigned Value (Circle One)	Score
---------------	--------------------------------	-------

#### A. Waste Characteristics

- |                                   |                   |
|-----------------------------------|-------------------|
| 1. Reactivity and Incompatibility | 0 1 2 3           |
| 2. Toxicity                       | 0 3 6 9           |
| 3. Hazardous Waste Quantity       | 0 1 2 3 4 5 6 7 8 |

Total Waste Characteristics Score	0
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#### B. Targets

- |                                      |                             |
|--------------------------------------|-----------------------------|
| 1. Population Within a 4-Mile Radius | 0 9 12 15 18<br>21 24 27 30 |
| 2. Distance to Sensitive Environment | 0 2 4 6                     |
| 3. Land Use                          | 0 1 2 3                     |

Total Targets Score	0
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#### Air Route of Migration Score

The Air Route of Migration Score is obtained by multiplying lines A and B and dividing this by 7.80 to give a score between 0 and 100.

Total Air Route of Migration Score: 0.00

# IV. DIRECT CONTACT ROUTE SCORE SHEET

Rating Factor	Assigned Value (Circle One)	Score
---------------	--------------------------------	-------

## A. Residential Population

1. Toxicity 0 3 6 9
2. Targets
  - a) High Risk Population  
(count x 8, max. 100) 0
  - b) Total Resident Population  
(count x 2, max. 100) 0
  - c) Sensitive Environment 0 10 15 20 25

Resident Target Score  
(lines 2a + 2b + 2c, max. 100) 0

Total Residential Population Score	0
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## B. Nearby Population

1. Likelihood of Exposure  
(matrix score) 0.5
  - a) Area of Contamination 0 25 50 75 100
  - b) Accessibility/  
Frequency of Use 5 25 50 75 100
2. Toxicity 0 3 6 9
3. Targets (max. 100) 100

Total Nearby Population Score	450
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Overall Population Exposure Score

The Overall Population Exposure Score is determined by adding lines A and B and dividing this by 18 to give a score between 0 and 100.

Total Population Exposure Route of Migration Score: 25.00

DOCUMENTATION RECORDS  
FOR  
STATE HAZARD RANKING SYSTEM

INSTRUCTIONS: Briefly summarize the information you used to assign a score to each factor and document the source of the information and/or the rationale for each score.

Facility Name:	<u>Carolina Chemical Corporation</u>
ID Number:	<u>NO NCD 000 2815</u>
Location:	<u>Wilson, Wilson County</u>
Date Scored:	<u>07/3/08</u>
Person Scoring:	<u>Sue Robbins</u>
Factors Not Scored:	<u>Air Route and Residential Population</u>

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Comments:

References:

1. State File.
2. North Carolina Atlas, University of NC Press, Chapel Hill, NC, 1975.
3. Rainfall Frequency Atlas of the US, Technical Paper 40, US Department of Commerce, Washington, DC, 1963.
4. 2000 Census of Population and Housing: Summary Population and Housing Characteristics: North Carolina, US Department of Commerce. <http://quickfacts.census.gov/qfd/>.
5. Dangerous Properties of Industrial Materials, N. Irving Sax, Van Reinhold Company, Inc., 1984.
6. 40 CFR 300, Appendix A, July 1, 1988.

## GROUND WATER ROUTE

### A. Route Characteristics:

#### 1. Depth to Water Table:

8: Ranges from 4.71 to 8.50 feet. Contamination in groundwater (1)

#### 2. Net Precipitation:

1: 46 - 41 = 5 inches (2)

#### 3. Hydraulic Conductivity of Unsaturated Zone:

2:  $2 \times 10^{-4} \text{ cm/sec}$  (1)

#### 4. Physical State:

3: Liquid pesticide (1)

### B. Containment:

3: Leaking, breached containers were noted on site (1)

### C. Waste Characteristics:

#### 1. Toxicity/Persistence:

18: DDT 3/3; Dieldrin 3/3; Chlordane 3/3 (1,5)

#### 2. Hazardous Waste Quantity:

5: Unknown (1)



## SURFACE WATER ROUTE

### A. Route Characteristics:

#### 1. Facility Slope and Intervening Terrain:

0: Facility slope < 1%; intervening terrain = 0.56% (1)

#### 2. One-year 24-hour Rainfall:

2: 3.0 to 3.5 inches (3)

#### 3. Distance to Nearest Surface Water/Name:

4: 2,000 feet to Hominy Swamp (1)

#### 4. Physical State:

3: Liquid pesticide (1)

### B. Containment:

3: Leaking, breached containers were noted on site. (1)

### C. Waste Characteristics:

#### 1. Toxicity/Persistence:

18: DDT 3/3; Dieldrin 3/3; Chlordane 3/3 (1,5)

#### 2. Hazardous Waste Quantity:

5: Unknown (1)

## AIR ROUTE

A. Waste Characteristics: **Not Scored**

1. Reactivity and Incompatibility:
2. Toxicity:
3. Hazardous Waste Quantity:

B. Targets:

1. Population within 4-mile Radius/Distance from Hazardous Substance:
2. Distance to Sensitive Environment:
3. Land Use:

## POPULATION EXPOSURE ROUTE

### A. Residential Population: Not Scored.

1. Toxicity:

2. Targets:

a. High Risk Population:

b. Total Resident Population:

c. Sensitive Environment:

### B. Nearby Population:

1. Likelihood of Exposure Score: 0.5

a. Area of Contamination:

50: 1.16 acre site (1)

b. Accessibility/Frequency of Use:

75: Fence shown on part of property, do not know if it is continuous (1)

2. Toxicity:

9: DDE - 3; DDD - 3; Chlordane - 3 (1,5)

3. Targets:  $0.1 ( \underline{1,734.8} ) + 0.05 ( \underline{4,246.1} ) = \underline{385.8} = 100 \text{ max}$

a. 0 - ½ mile:  $3.14 (0.5^2) \times \underline{2,210} \text{ people/sq.mi} = \underline{1,734.8}$  (4)

b. ½ - 1 mile:  $3.14 (1^2 - 0.5^2) \times \underline{1,803} \text{ people/sq.mi} = \underline{4,246.1}$  (4)